# Gender and Study Behavior: How Social Perception, Social Norm Adherence, and Structured Academic Behavior are Predicted by Gender

Kristen M. Grabill, Terell P. Lasane, Wendy T. Povitsky
*St. Mary's College of Maryland*

Patrick Saxe
*State University of New York at New Paltz*

Geoffrey D. Munro
*Towson University*

Lori M. Phelps and Jason Straub
*St. Mary's College of Maryland*

Recent research notes the correlation between student academic behavior and internalized gender schemas. In the present investigation, researchers sought to replicate and extend past research by undertaking a study that assessed the following: correlations between students' time structure and gender role orientation, gender related social perceptual biases with respect to studying, and the effects of academic social norms on self-presentation behavior. Ninety-six college students completed a series of questions designed to measure gender correlates of their academic behaviors. Participants also participated in an experimental lab task where they were asked to publicly rate the importance of studying after hearing a staged social norm that emphasized or deemphasized the importance of studying. Finally, participants evaluated a hypothetical student target who publicly reported investing high or low effort in order to get a good grade on an assignment. Results support the key predictions that gender is implicated in schemas that students have about good study behavior, how much one is influenced by social norms regarding studying behavior, and how one evaluates students who do well. Researchers discuss the findings in the context of gender schema theory, social norms theory, self-regulation and self-presentation theory.

Considerable recent evidence has suggested that gender roles are influential in determining the achievement outcomes of college students. Although the claims of a male crisis in higher education are inconclusive,

recently researchers have reported that men are at significantly higher risk than their female counterparts for academic difficulties that may lead to academic probation, extended tenure at their institutions, or ultimate dropout (King, 2000). An exploration of the role of gender on the self-motivational properties of academic goal setting and consequent achievement has been recognized as a key component of students' studying behavior (Lasane, Howard, Czopp, Sweigard, Bennett, & Carvajal, 1999). Studies on academic self-regulation that grow from self-regulation theory converge on the finding that students are more likely to succeed in college when they have agency in their own learning outcomes, can effectively determine the strategies that promote their own achievement, and establish their own means-ends structures for ensuring that their academic sub-goals are effectively met (Lasane & Jones, 1999; Schunk & Zimmerman, 1994; Zimmerman, 1990; Zimmerman, Bandura, & Martinez-Pons, 1992). Gender seems implicated in this process, as research has shown that females may be more adept at employing self-regulated academic strategies than males (Ablard & Lipschultz, 1998).

In this investigation, we sought to clarify how gender may be correlated with a student's studying behavior. Bem (1981) contends that "gender schema becomes a prescriptive standard or guide and self-esteem becomes its hostage." (p. 355). This statement follows from gender schema theory (Bem, 1981) which holds that individuals process information from social interactions based on their assessment of that information along the gender dimensions of masculinity and femininity. Individuals who incorporate gender roles consistent with their biological sex into their self concepts are said to be gender schematic. Women seem to have more latitude than men in the choice of the predominant gender role that they will ultimately adopt as a part of their identity formation. Women may adopt a feminine, masculine or androgynous orientation; whereas, men have restrictive options for gender role expression and will adopt masculine or androgynous gender role orientation. This male preoccupation with gender may reflect a recognition that a man's femininity comes with a high price: peer rejection, social disapproval, and ostracism in our society (Lamb & Roopnarine, 1979). If self-regulated academic behavior, a behavioral tendency that is associated with college student success and achievement, is considered high along the dimensions of femininity, individuals who are schematic on the dimension of masculinity may be reluctant to adopt these academically instrumental behaviors despite the clear academic benefits of such behaviors (Hancock & Stock, 1996).

The gendered aspects of academics may pose an interesting self-presentation challenge to gender schematic individuals who engage in impression management. Despite the fact that achievement is associated

with masculinity, the behaviors that promote achievement are often perceived as feminine and socially unattractive. This was demonstrated in a study where Lasane, Sweigard, Czopp, Howard and Burns (1999), instructed college students to evaluate an academically structured or an unstructured target on a number of attractiveness and gender dimensions. Participants ranked the structured target as being significantly more masculine *and* more feminine than the unstructured target. Other research has extended the finding that academic success is associated with masculinity, but the effort required to achieve this success is feminine (Adler, Kless, & Adler, 1992; Burke, 1989; Czopp, Lasane, Sweigard, Bradshaw, & Hammer, 1998).

Collectively, these studies suggest that male and female students are exposed to different gender scripts for studying behavior and seem to be affected by the distinct sub-cultures which reward gendered aspects of academic life. For masculine individuals, academic success seems to be highly regarded, but this achievement is valued more when it comes naturally and without vulnerability to academic planning and preparation. In contrast to this, feminine study orientation involves working diligently to reap the concomitant academic rewards which follow from such a dedicated investment of transparent effort (Ablard & Lipschultz, 1998).

Evidence in this area suggests that college students are likely to modify their self-presentation in study situations in order to reap social rewards and to avoid social punishments. Leary, Nezlek, Downs, Radford-Davenport, McMullen and Martin (1994) found that familiarity of the individuals with whom one interacts can attenuate impression management motivations, but only in interactions of mixed sex composition. Heatherington, Townsend, and Burroughs (2001) found that males were more likely than females to make a higher prediction of their own achievement (G.P.A.) when interacting with another male concerned about his achievement. Taken together, these studies suggest that academic impression management may be a concern in settings where men and women have heightened awareness of gender scripts and are motivated to adhere to the norms established in those particular contexts. These findings are consistent with Deaux and Major (1990) who posit in their extension of self-presentation theory (Tedeschi, 1981) that the gendered nature of behavior evolves from the context in which the behavior takes place, the behavioral cues set by others, and the individuals' personalities that may supersede the explicit or implicit demands to gender role conformity. In this study, we were interested in exploring whether gender, independent of biological sex, could account for the variability in students' studying behavior.

According to gender schema theory, the strength of a correlation between a gender dimension and actual behavior is related to the degree

to which individuals incorporate gender schemas into their self-concepts. Another way of conceptualizing this is to consider the extent to which individuals are concerned with conformity to an existing gender norm for a specific behavior. Accordingly, another goal of the present study was to determine to what degree participants would be affected by what they perceived to be the studying behavior of others with whom they are likely to engage in gender relevant social comparison.

An impressive body of research supports conformity to social norms. In the classic line estimation study, Asch (1951) found that most individuals will misreport an individual perception of a clear objective reality (the selection of a line which matches a standard line) when the majority of their peers report a clearly incorrect response. In our study, we used a more ambiguous judgment task than line estimation to examine the degree to which participants would publicly rate the importance of studying relative to competing activities in their lives when confronted with a fabricated social norm about studying importance. We were interested in determining if students would demonstrate general conformity to their peer rankings.

Research on college student social behavior supports this. Social norm theory (Berkowitz, 2003; Perkins, 2003) suggests that individuals often make impaired decisions based on judgmental biases in the form of pluralistic ignorance, false consensus, and false uniqueness. Pluralistic ignorance is the false perception that one's personal beliefs deviate from others. False consensus is the erroneous belief that the behavior of others resembles one's own. False uniqueness refers to the belief that personal behavior is distinctive relative to others. In general, the aforementioned social cognitive biases manifest themselves in self-enhancing and self-protective ways (Perloff & Brickman, 1982). Social norms theory has been used to effectively explain college students' decision making lapses with respect to sexual violence on campus, alcohol abuse, and other forms of student misconduct (Fabiano, 2003; Prentice & Miller, 1993). We were interested in determining whether the general tendency to conform to perceived social norms would predict the actual studying behavior reported by students in an unrelated task. We reasoned that vulnerability to gender-based norms might correlate with academic structure due to the social cognitive biases suggested by social norm theory.

In sum, we undertook the present study to replicate and extend prior research on gender and academics. We set out to explore whether schemas of college student study behavior could be reliably correlated with the gender schemas of college students and to determine if these gender schemas for study behaviors were correlated with college students' academically structured behaviors. We also wanted to examine

the impact that the perceived norms of peer behaviors would have on students' attitudinal conformity to such norms in public situations. Finally, we wished to test the reliability of a model that predicted students' studying behaviors from gender-typed beliefs about studying and gender conformity to studying norms even after we had controlled for gender and sex. Our rationale for the investigation of these hypotheses derived from self-regulation theory, gender schema theory, self-presentation theory, and social norm theory.

H1: We hypothesized that students would demonstrate internalized beliefs about the gender typed nature of structured academic behaviors. Moreover, students would conceptualize these gendered academically structured behaviors as feminine. We expected that their self-reports would provide support for false-consensus, false uniqueness, and pluralistic ignorance effects.

H2: When presented with a staged social norm, students would conform in their public report of the relative importance of studying versus other activities in their lives.

H3: Feminine individuals would publicly report a higher value on the importance of studying than masculine individuals, irrespective of norm condition.

H4: In an impression formation task, there would be significant social perception differences between an academically structured and academically unstructured target on several social dimensions and in the gender of the target.

H5: The actual academic behavior of the participants, as assessed by the degree of academic structure, could be reliably predicted by gender schemas about studying even after controlling for sex and gender role.

## METHOD

### Participants

Ninety-six (27 male and 69 female) undergraduate students aged 17 to 21 ($M= 18.21$, $SD = 0.82$) participated in the study to fulfill their introductory level psychology requirement. The sample was predominantly female. During the semester that the study was run, only a third of the students in the subject pool were male. Most of the participants (84.4%) were first year students and all were undergraduates at a Northeastern public liberal arts college.

### Materials

We measured gender orientation with the *Personal Attributes Questionnaire*, a 16-item instrument containing characteristics corresponding to masculine and feminine roles. Participants rank the

degree to which the attribute describes them on a 5 point scale ranging from 1 (not at all) to 5 (very much). A sample masculinity item is independence; a sample femininity item is passiveness (Spence, Helmreich, & Stapp, 1974). In our study, we obtained a Cronbach's alpha of .74 for the eight-item masculine sub-scale and an alpha of .77 for the eight item feminine sub-scale. PAQ is a widely used measure that has demonstrated reliability and validity.

Academic Time Structure was measured by adapting items from the *Time Structure Questionnaire*, a twenty-six item measure introduced by Bond and Feather (1988). Participants respond to the degree to which they engage in structured and purposive academic behavior by using a 7-point rating scale ranging from 1 (No, Never) to 7 (Yes, Always). Only fourteen of the twenty-six items used were relevant to academic structure, while the remaining twelve were filler. Sample items from the scale include "Do you take a long time to get started on schoolwork?" and "Do you have a daily routine you follow in order to complete your schoolwork?" We obtained an alpha of .86 for our fourteen item adaptation of the scale.

We developed a short-scale to measure the extent to which participants demonstrate gender bias with respect to academic behaviors. Participants responded to two questions that formed a Gender Bias in Academics measure: "Do you believe that males or females do better in your classes?" "Do you believe that males or females study more for classes?" The participants responded to this scale using a 1 (Males) to 7 (Females) rating scale. Thus, a rating of 4 indicated the absence of gender bias with respect to academic behaviors. We also posed two questions in order to assess the degree to which participants believed that their study behavior was typical of members of their respective gender groups. Participants responded to questions regarding the frequency of their study behaviors relative to members of their own sex and members of the opposite sex group, using a 1 (Studies More) to 7 (Studies Less) rating scale.

Participants were also randomly assigned to an impression formation condition where they either read a vignette about a hypothetical student, Student C, who had earned an A by reporting structured academic behaviors (studied over time, read before coming to class, took detailed notes, visited the professor during office hours) or about a student who had earned an A by unstructured academic behaviors (studied last minute for the exam, read the chapters before the exam, took sparse notes, and did not prepare any study guides, no visits to the professor with regard to unclear concepts). Participants were asked to give the overall evaluation of the student, to indicate their desire to hang out with the target, to indicate how likely the student is to be considered a nerd, how attractive

others would find the student as a romantic partner, how they would feel if they were told that they were just like the depicted target, and asked to indicate whether they thought the student was a male or female. A question to check of the effort manipulation condition was randomly interspersed with the other items. All of the impression formation questions used a five-point rating scale with a midpoint of 3 and with higher scores indicating a more favorable impression. The final question, the guess of the target's sex, was dichotomous. Participants were asked to circle male or female.

## Design and Procedure

Students arrived at our observation lab in groups of five to participate in a study ostensibly described as a "National College Survey." We tested participants in a room where their behavior could be observed through a one-way mirror. The researcher presented the cover story to the participants that this administration was part of a large national survey that was investigating student attitudes on a variety of aspects of student life (athletics, academics, residence life, community service) on college campuses, and that their particular testing group had been randomly selected to discuss academics. In actual fact, all students in the study were discussing "The Academic Life of College Students" with peers in a small group discussion. After students arrived at the experimental lab, we administered a packet of questionnaires to ask various aspects of the study culture of their campus. The instruments contained in the packet were those described above.

After we collected completed questionnaires, we showed the participants a video clip from a movie, *Road Trip*, where a group of young college students are involved in a cross country trip to intercept a video tape, exposing an illicit affair between a principal male character and a young woman he meets at a party, that was inadvertently mailed to the young man's girlfriend. The movie clip was a distraction task used to reduce participants' suspicion that their responses to the battery of questionnaires that they had just completed would be somehow associated with the social norm manipulation which was to follow. In order to increase the credibility of the previously stated cover story of exploring college student's life, participants were instructed to write a brief response to the movie, describing how typical this scenario was in the lives of college students and how this unusual scenario might interfere with the study culture of students.

After participants completed their responses to the movie clip, we informed them that we now wanted to show them college students' typical reactions to the following question posed in the national study described earlier: "How important would you rate studying relative to

other activities on a college campus, on a scale of one to seven, with one being the less important and seven being the most important?" We manipulated the norm of importance with a 2 (importance level) x 2 (sex of person representing the typical norm) design. We informed participants that the student response that they were about to see, reported by a student from their campus was *typical* of the national responses to this question. More specifically we told the small group that 80% of the national student body that was sampled from participating colleges and universities, gave a response very similar to the one endorsed by their peer from this institution on the videotaped response to follow. Researchers then played a videotape of a male or female student whose response was ostensibly typical of the peer ranking of study importance nationwide. In the *low importance condition*, a male or female confederate from the participants' institution reported that studying was a "3" in importance on a college campus and stated how important it was to develop social ties and to have fun while in college. The confederate in this condition further asserted that academics were only a part of the college experience and there were many more things involved in a college student's life. In the *high importance condition*, the male or female confederate stated that studying was a "6" in importance. This confederate in this condition further offered the idea that studying was the primary reason for coming to school and that one could develop in the other areas of college life later when they had more time and had completed their academic studies.

After participants received the staged norm presented by the confederate, they were asked to publicly state the importance of studying in the presence of four peers who were in the room. We randomly assigned participant seating before they arrived at the experiment, and researchers gathered their responses in a systematic (counterclockwise) fashion. Participants were to report their importance ranking on the seven point scale described above, and we led them to believe that a major discussion would ensue that was the primary goal of their participation in this study. After researchers in the next room gathered their public responses, an experimenter came in, de-hoaxed and debriefed participants about the true purpose of the study, the cover story, the fabricated norms, and the irrelevance of the task. We provided our rationale for the necessity of the deception methodology and answered any questions that they had. We also queried whether any of the participants had guessed our true purpose or were upset by the manipulation. None were. We advised them to refrain from discussing the protocol with other groups, as the testing would be taking place over the space of ten days. Participants had not heard anything about the study from participants who had participated previously. Participants

were then dismissed. Participants were treated in accordance with the APA standards of ethical conduct (American Psychological Association, 1992).

## RESULTS

We conducted two analyses to test the hypothesis that students would demonstrate gender schemas with respect to studying behavior. First, we conducted a one-sample t-test to see if the composite of the two-item gender bias of academics would differ significantly from the gender neutral mid-point of four.  As predicted, we found, using the scale of 1 (male) to 7 (female), that the pooled sample of male and female students associated academic success and studying with a female bias ($M=$ 5.14, $SD=$ .72), $t$ (95) = 15.28, $p <$ .001. We found support for the false consensus effect within males and females. We conducted a $t$-test for independent groups on the question that assessed participants' responses of their study behaviors relative to members of their in-groups.  When men and women compared their behaviors to members of their respective sex group, we found no differences. Men ($M=2.07$, $SD=.92$) and women ($M=2.07$, $SD=$ .92) regarded their relative study behaviors within groups to be the same, $t$ (94) = .00, $n.s.$  It is interesting to note that this measure used a 1 (studies more) to 7 (studies less) scale. So, all participants reported that they study significantly more than members of their sex group, giving us support for the self-enhancing false uniqueness effect of social norms theory. Testing against the neutral value of 4, participants' had, on average, an enhanced view of their own study behaviors, $t$ (95) = 21.32, $p <$ .001. Also, as we hypothesized, men and women converged on the point that there were differences in the study behaviors of the opposite sex, $t$ (94) = 6.08, $p <$ .001. Women perceived that they studied significantly more ($M=1.70$, $SD =$ .73 ) than men ($M=2.67$, $SD=$ .62) did.

For our second and third hypotheses, we undertook analyses to see whether the perceived social norms and gender role orientation would affect the self-report of the importance of studying relative to other competing activities in the college students' lives. We conducted a 2 (Norm Condition) X 2 (Participant Sex) X 2 (Feminine Gender role orientation) between-subjects ANCOVA, using academic structure as a covariate. We found support for our second hypothesis that norm condition would affect the self-report of the importance of studying, $F$ (1, 77) = 8.48, $p <$ .01. With respect to our third hypothesis, we hypothesized that there would be sex differences between men and women in their ranking of studying importance, but there were none, $F$ (1, 77) =2.00, $p >$ .05.  Partial support for this hypothesis was obtained. Gender role did affect this self report, $F$ (1, 77) = 4.48, $p <$ .05. As the results in Table 1 show, both those in the high importance condition and feminine

individuals ranked studying as more important than those in the low importance group and the non-feminine (pooled group of masculine and androgynous) individuals. No significant interactions emerged ($ps > .05$). The level of academic structure was a significant covariate of public presentation of studying importance $F(1, 77) = 13.39, p < .001$. Higher academic structure was associated with higher self-reports of the importance of studying, $r(94) = .29, p < .01$.

TABLE 1  Public Report of Study Importance by Condition and Gender

|  | Low Importance | | High Importance | |
|---|---|---|---|---|
|  | Masculine | Feminine | Masculine | Feminine |
| *M* | 4.10 | 4.50 | 5.14 | 4.97 |
| *SD* | 1.40 | 1.09 | .73 | .64 |
| *N* | 29 | 20 | 23 | 16 |

*Note*: These scores represent public report on a 1 (Not very important relative to other activities in students' lives) to 7 (very important relative to other activities in students' lives).

The fourth hypothesis involved an examination of the impressions made about a hypothetical target in an impression formation task. We first examined the correlations between the dependent variables used to assess perceptions of the hypothetical target, Student C, described in the vignette. Because the set of dependent variables were inter-correlated, we conducted a one way MANOVA on the combined dependent variable using impression formation condition as the between-subject's factor. Using Hotelling's trace criterion, we found support for the hypothesis that there were significant social perception differences on the combined dependent variables as a function of condition, $F(6, 85) = 140.85, p < .001$. An examination of the univariate test results revealed that the two impression formation groups differed in their evaluation of the effort level of the student. Thus, our manipulation was effective. The two conditions also differed in their overall evaluation of the student, the evaluation of their response in being told that they were just like the hypothetical target, and the likelihood that the student would be considered a nerd. As means and standard deviations in Table 2 suggest, the structured student was considered more attractive overall, more likely

to be considered a nerd, and someone the participants would feel more positively being compared to ($ps < .01$) than the unstructured target. Students did not differ in their evaluation of their willingness to hang out with the student or in the romantic attractiveness of the student, $ps > .05$.

TABLE 2  Mean (Standard Deviation) Social Perception Ratings of Hypothetical Target as A Function of Effort

| | Target's Study Effort | |
| Variable | High Effort | Low Effort |
| --- | --- | --- |
| Overall Evalation * | 4.38 (.85) | 2.49 (.91) |
| Desirability as activity partner | 3.06 (.81) | 2.91 (.81) |
| Romantic Attractiveness | 2.94 (.55) | 3.16 (.75) |
| Nerdiness* | 3.54 (.99) | 1.76 (.75) |
| Reaction to implied self resemblance* | 3.49 (1.02) | 2.72 (1.24) |
| Effort Level (Manipulation Check)* | 4.88 (.33) | 1.74 (.73) |

NOTE: All variables, with the exception of target's nerdiness, were measured on a 1-5 scale, with higher score representing the more favorable impression of the hypothetical target.
   *$p < .001$

We also undertook analyses to see if the participants would show a gender bias when guessing the sex of the organized and disorganized target depicted in the vignettes. As predicted, there was a significant relationship between the guess of the target's sex and the impression formation condition, $\chi^2$ (1, $N=88$) = 53.03, $p < .001$. We inspected the residuals of each of the cells and found that the significant relationship seemed to be explained by the disproportionate number of participants who guessed that the academically structured target would be female.

For our final hypothesis, we examined a model to predict the self-reported academic structure of the students. We reasoned that the social scripts regarding gender appropriate academic behaviors would relate to actual studying behavior even after we controlled for the sex and the gender role of the participants. In order to test this hypothesis, we regressed sex and gender on the academic structure score in the first step

of a simultaneous regression and entered the variables operationalizing susceptibility to gender role norms on the second step. Variance inflation factors ($VIFs$) were computed to assess the potential multicollinearity of the predictor variables, but there was no evidence that these predictors were collinear. We examined $\Delta R^2$ as the index of the significance of the change. Our results confirmed our hypothesis. As a set, gender and the subject's sex were significant predictors of Structured Academic Behaviors, $R^2$ (3, 88) = .282, $p < .001$. Specifically, sex ($\beta=.38$, $t(88)=4.19, p < .001$) and masculinity ($\beta=.38, t(88)=5.34, p < .001$ ) were significant predictors of structured academic behavior. Femininity was not a significant predictor ($p > .05$). In the second step, we regressed the extent to which participant's demonstrated bias with respect to academic behaviors and the public report of the importance of studying behaviors demonstrated in the experimental task. These predictors were significant predictors even after we had controlled for the gender variables $\Delta R^2$ (4, 87) = .11, $p < .01$. Both of the predictors in the second step were significantly related to Structured Academic Behavior, Gender Bias in Academics ($\beta=-.164, t(86)=1.90, p < .05$ ) and the public conformity to the apparent social norm ($\beta=.27, t(86)=3.15, p < .01$ ). The results of the full regression model are shown in Table 3.

TABLE 3  Model Summary of Simultaneous Regression Analysis
Predicting Structured Academic Behaviors from Gender
Variables and Conformity to Gender Typed Social Norms

| Variable | β | SE B | $\Delta R^2$ |
|---|---|---|---|
| Step 1 | | | .28*** |
| Sex of Participant | .38*** | .18 | |
| Masculinity | .47*** | .02 | |
| Femininity | .02 | .02 | |
| Step 2 | | | .11** |
| Gender Bias with Studying | -.16* | .10 | |
| Conformity to Social Norms | .27** | .06 | |

*Note*: For the full model, $R^2$ (5, 86) = .39, $p < .001$.
Regression coefficients are reported from the step on which each variable was first entered.
* $p < .05$. **$p < .01$. ***$p < .001$

## DISCUSSION
Key predictions were confirmed with our data. We hypothesized that our participants would have schemas of an academically structured student that mapped onto femininity, and we found support for this

hypothesis. The feminine bias associated with studying was confirmed with several lines of evidence. Participants reported that females were more likely to perform better academically and to study more in general. These perceptions were consistent between males and females. When evaluating a hypothetical target who demonstrated high effort in order to receive a good grade versus a target who received a good grade but attributed his/her outcome to chance factors, participants were more likely to associate the high effort target with women and the low effort high-achieving target with men. Finally, feminine individuals were more likely to rank, in a public laboratory task, a significantly higher evaluation of the importance of studying than those who self-reported significantly higher levels of masculinity.

These results are consistent with earlier work that has suggested that even among college students, the process of self-regulated, structured academic learning may be regarded as a feminine phenomenon. More specifically, the gender norms of college students may create explicit and implicit norms of study behavior that place a higher value on achievement without ostensible effort (masculine study behavior) than to the achievement that seems to follow from hard work and careful planning (feminine study behavior). Further, there appears to be no social liability for leaving one's academic outcomes to chance and to planning fallacies while being publicly planful may have a negative stigma associated with it. In the impression formation task, for instance, the unstructured target was considered equally as attractive as a romantic partner and hangout partner as the structured target; however, the structured target was considered more of a nerd, a label that has pejorative connotation in the social environments of college students.

The apparent gender content of these studying behaviors may also have implications on academic behavior as well. To the degree that students are schematic on the dimension of gender, individuals may deliberately modify their behavior to fit in line with gender congruent norms. The preponderance of research suggests that men are more likely to demonstrate a fear of being labeled feminine than women are to being labeled masculine. Thus, this finding may suggest that men are especially vulnerable to the self-presentation hazards of behavioral self-regulation that will place a lower value on time structured academic planning.

On the other hand, some of our evidence suggests that there may be little impetus to change behaviors that foster the impression that one does invest a great deal of time and effort into self-regulated studying. Some of our research suggests that the individual who does not study in a self-regulated way may be seen as more competent or "naturally" intelligent than someone who invests a great deal of time in planning and executing academic responsibilities. Moreover, the individual who plans and

structures assignments may be regarded as neurotic or easily stressed by achievement related tasks. This may emanate from the conceptualization of a person who frequently plans as one who also has a low threshold for uncertainty and spontaneity or who cannot adapt well to the inevitable changes of day-to-day life. If it is true that individuals who are able to achieve success without the apparent investment of considerable effort may be more likely selected for positions of leadership and power, then it may follow that the perception of individual competence and natural ability may be undermined by feminine study behaviors for the reasons cited above. Showing calm reserve in the face of adversity and spontaneous problem-solving are construed as part of the masculine or instrumental orientation associated with competence and task completion (Czopp et al., 1999; Lasane et al., 1999).

We were also interested in determining the degree to which a manipulated social norm and self-reported femininity would affect students' conformity to a norm about studying importance. We found that participants were significantly influenced by a staged social norm. When participants believed that peers placed studying at a high level of importance, they ranked it as more important than when they perceived that it was ranked at low importance. This finding was irrespective of the sex of the confederate presenting the norm or the sex of the subject. Further, feminine individuals were more likely to "stand their ground" regarding the importance of studying relative to competing activities in college students' lives when compared to masculine peers. These results suggest that in situations where one must publicly decide whether to forgo academic responsibilities relative to competing events, students, may, in fact, gauge the attitudes of similar others when making those decisions. This may be troublesome when one considers the small group dynamics that can adversely affect individual decision making (Carron & Prapavessis, 1997). Research on socially induced temporal myopia (Lasane & Jones, 2000) underscores the need for concern of this finding. College students' self-regulated behaviors are often influenced by incidental happenings that are encouraged by friends and that directly interfere with academic pursuits. On the other hand, these results may be encouraging. Students who emphasized the importance of studying relative to their peers might benefit from peer mentoring programs.

The impact of these social norms may be more pronounced in environments that have well known scripts for academic procrastination. For instance, in some college settings, athletic teams, fraternities and sororities, and other organized groups may encourage behavioral responses from its members that rank studying second to social activities. Our results suggest that the pervasive power of false consensus effects and pluralistic ignorance may actually serve to sustain and even facilitate

the formation of those faulty and academically detrimental social judgments. In addition to educating students about the documented merits of self-regulated behaviors, strategies should be developed and tested which help to attenuate the effects of these influential beliefs. Research should be undertaken to explore whether these effects are observed in groups that have a higher proportion of gender schematic individuals or in contexts where gender norms are salient.

We found support for the existence of gender norms regarding academic behaviors and the general effect that these norms may have on public behavior. We were also interested in exploring whether these gender factors and the susceptibility to conformity to these norms could predict self-regulated academic behavior even after controlling for sex and gender role. Our results reveal that there are sex differences in structured academic behavior and that these behaviors correlate with psychological masculinity. We were surprised that femininity was uncorrelated with academic structure, given the relationship of femininity to so many of the academic behaviors we examined. Although masculinity and femininity are statistically independent measures, perhaps this null correlation with femininity reflects the instrumental nature of academic time structure and suggests that there is a strong prevailing belief that masculinity is the singular instrumental orientation. The correlation between masculinity and academic time structure is consistent with findings from past research that indicate that masculine and feminine individuals value academic success equally but arrive at this success through different paths. Future research should identify the components of academic self-regulation that are congruent with masculine behaviors and feminine behaviors. Gender schematic individuals may require exposure to different intervention methods in order to ensure compliance with study schedules that can foster their individual academic success. Further research should explore the fact that those who are most susceptible to gender role conformity and to conceptualizing studying behavior in a gendered manner are also more likely to display less structured study behaviors. Does this correlation reflect an active attempt at gender self-presentation and/or a lack of experience and self-efficacy with respect to academic self regulation? Future research should address this question and test the relative importance of these distinct and possibly overlapping motives.

The results here support the work of researchers who have recently found that gender role conformity may impact academic goal-setting, behavior, and achievement (Lasane, Howard, Czopp, Sweigard, Bennett, & Carvajal, 1999). These findings have far reaching implications. Gender is a central dimension in the identity formation process and one on which a number of students are schematic. The results here point to the

importance of exploring gender's relation to studying behavior and using creative approaches to helping students gain understanding of themselves while maximizing their academic potential and social development at this important juncture in their lives. Even those who are not in late adolescence/early adulthood make academic decisions that reflect the inclusion of academics into their self-concepts. These students make these decisions while considering multiple identities that concurrently impinge on their lives. It is important that educators, counselors, and students themselves be cognizant of the multiple role demands confronting students as they develop inside and outside of the college classroom. This endeavor is part of a research program which examines the importance of the academic self-concept in understanding student academic and social behavior.

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